

# UTILITY PATENT APPLICATION TRANSMITTAL (Large Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.  
END920010002US1

Total Pages in this Submission  
4

## TO THE ASSISTANT COMMISSIONER FOR PATENTS

Box Patent Application  
Washington, D.C. 20231

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53(b) is a new utility patent application for invention entitled:

**LEAD-FREE SOLDER STRUCTURE AND METHOD FOR HIGH FATIGUE LIFE**

and invented by:

S. K. Ray et al.

ASSIGNEE NAME: INTERNATIONAL BUSINESS MACHINES  
CORPORATION

ASSIGNEE RESIDENCE: ARMONK, NEW YORK

If a **CONTINUATION APPLICATION**, check appropriate box and supply the requisite information:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Which is a:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Which is a:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Enclosed are:

### Application Elements

1. ☒ Filing fee as calculated and transmitted as described below
2. ☒ Specification having 23 pages and including the following:
  - a. ☒ Descriptive Title of the Invention
  - b. ☐ Cross References to Related Applications (if applicable)
  - c. ☐ Statement Regarding Federally-sponsored Research/Development (if applicable)
  - d. ☐ Reference to Microfiche Appendix (if applicable)
  - e. ☒ Background of the Invention
  - f. ☒ Brief Summary of the Invention
  - g. ☒ Brief Description of the Drawings (if drawings filed)
  - h. ☒ Detailed Description
  - i. ☒ Claim(s) as Classified Below
  - j. ☒ Abstract of the Disclosure

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## Application Elements (Continued)

3. ☒ Drawing(s) (when necessary as prescribed by 35 USC 113)  
3 SHEETS  
a. ☐ Formal Number of Sheets \_\_\_\_\_  
b. ☐ Informal Number of Sheets \_\_\_\_\_
4. ☒ Oath or Declaration  
a. ☐ Newly executed (original or copy) ☒ Unexecuted  
b. ☐ Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional application only)  
c. ☒ With Power of Attorney ☐ Without Power of Attorney  
d. ☐ DELETION OF INVENTOR(S)  
Signed statement attached deleting inventor(s) named in the prior application,  
see 37 C.F.R. 1.63(d)(2) and 1.33(b).
5. ☐ Incorporation By Reference (usable if Box 4b is checked)  
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
6. ☐ Computer Program in Microfiche (Appendix)
7. ☐ Nucleotide and/or Amino Acid Sequence Submission (if applicable, all must be included)  
a. ☐ Paper Copy  
b. ☐ Computer Readable Copy (identical to computer copy)  
c. ☐ Statement Verifying Identical Paper and Computer Readable Copy

## Accompanying Application Parts

8. ☐ Assignment Papers (cover sheet & document(s))
9. ☐ 37 CFR 3.73(B) Statement (when there is an assignee)
10. ☐ English Translation Document (if applicable)
11. ☒ Information Disclosure Statement/PTO-1449 ☒ Copies of IDS Citations
12. ☐ Preliminary Amendment
13. ☒ Acknowledgment postcard
14. ☒ Certificate of Mailing

☐ First Class ☒ Express Mail (Specify Label No.): ET029404752US

*(Only for new nonprovisional applications under 37 CFR 1.53(b))*

Total Pages in this Submission  
4

16. ☐ Additional Enclosures (please identify below):

***An applicant who makes a request not to publish, but who subsequently files in a foreign country or under a multilateral international agreement specified in 35 U.S.C. 122(b)(2)(B)(i), must notify the Director of such filing not later than 45 days after the date of the filing of such foreign or international application. A failure of the applicant to provide such notice within the prescribed period shall result in the application being regarded as abandoned, unless it is shown to the satisfaction of the Director that the delay in submitting the notice was unintentional.***

**UTILITY PATENT APPLICATION TRANSMITTAL**  
**(Large Entity)**

*(Only for new nonprovisional applications under 37 CFR 1.53(b))*

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**Fee Calculation and Transmittal**

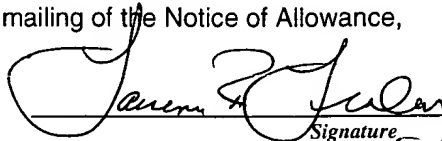
**CLAIMS AS FILED**

For	#Filed	#Allowed	#Extra	Rate	Fee
Total Claims	30	- 20 =	10	x \$18.00	\$180.00
Indep. Claims	4	- 3 =	1	x \$80.00	\$80.00
Multiple Dependent Claims (check if applicable) <input type="checkbox"/>					\$0.00
BASIC FEE					\$710.00
OTHER FEE (specify purpose)					\$0.00
TOTAL FILING FEE					\$970.00

- ☐ A check in the amount of \_\_\_\_\_ to cover the filing fee is enclosed.
- ☒ The Commissioner is hereby authorized to charge and credit Deposit Account No. **09-0457** as described below. A duplicate copy of this sheet is enclosed.
- ☒ Charge the amount of **\$970.00** as filing fee.
  - ☒ Credit any overpayment.
  - ☒ Charge any additional filing fees required under 37 C.F.R. 1.16 and 1.17.
  - ☐ Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

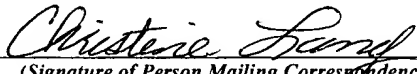
Dated:

*Feb. 08, 2001*

  
Signature

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cc: RECORDS

<b>CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.010)</b>			Docket No. <b>END920010002US1</b>
Applicant(s): <b>S. K. Ray et al.</b>			
Serial No.	Filing Date <b>HEREWITH</b>	Examiner	Group Art Unit
Invention: <b>LEAD-FREE SOLDER STRUCTURE AND METHOD FOR HIGH FATIGUE LIFE</b>			
I hereby certify that the following correspondence: <div style="border: 1px solid black; padding: 5px; margin: 5px 0;">Patent Application, 3 sheets drawings, Fee Transmittal, IDS, PTO-1449 Form &amp; references, unsigned declaration, postcards, express mail certificate</div> <p style="text-align: center;"><i>(Identify type of correspondence)</i></p> is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231 on <div style="text-align: center;"><u>2/08/01</u> <i>(Date)</i></div> <div style="text-align: center; margin-top: 20px;"><u>Christine Lang</u> <i>(Typed or Printed Name of Person Mailing Correspondence)</i> <div style="text-align: center;"> <i>(Signature of Person Mailing Correspondence)</i></div><div style="text-align: center; margin-top: 10px;"><b>ET029404752US</b> <i>("Express Mail" Mailing Label Number)</i></div></div>			
Note: Each paper must have its own certificate of mailing.			